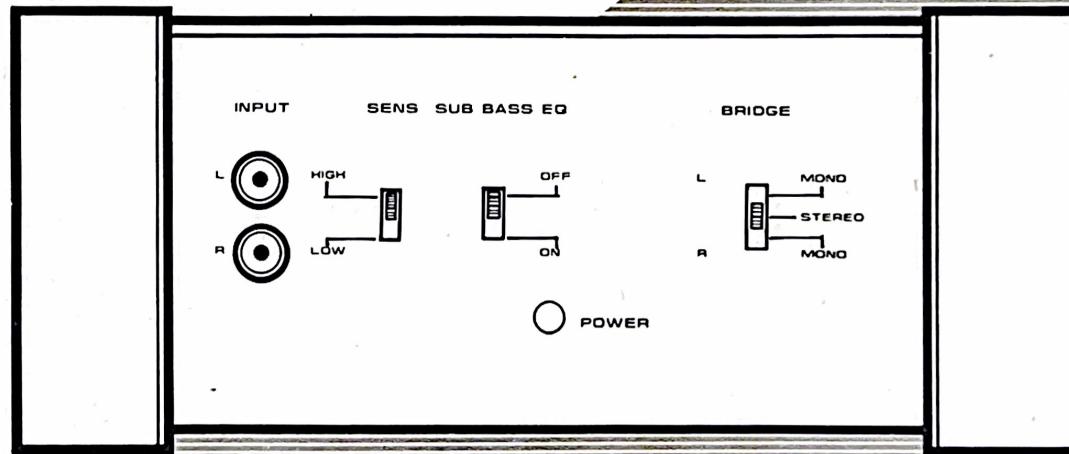




## **SCA-2100**

### **70W+70W AUTO SOUND AMPLIFIER**



**INSTALLATION and  
OPERATION MANUAL**

## Congratulations on your Purchase!

Your new high fidelity Bridgeable Auto Sound Amplifier is designed to deliver maximum enjoyment and years of trouble free service. Please take a few moments to read this manual thoroughly. It will explain the features and operation of your unit and help insure a trouble free installation.

## Features

Your new high fidelity Auto Sound Amplifier has been designed as thin and flat shape for any style of floor mounting and for negative ground power systems.

- 70W+70W average power output.
- Bridge operation selector for 140W MONO output.
- Capacitor less direct coupled output stage.
- Relay circuitry for speaker protection against power transition noise, short circuit, over load and DC shift.
- High/Low input sensitivity selector.
- Sub-bass EQ ON/OFF switch.
- Automatic remote power ON/OFF control.
- LED power indicator.

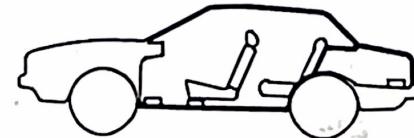
## Unpacking and Installation

Please unpack your unit carefully. We recommend that you save the carton and packing material. They will be helpful should you ever need to move your unit and may be required if you ever need to return it for service.

Your unit comes with a complete kit that includes each 5 of the mounting screw and washer, and a stereo shield cable with the plugs.

1. For the first time, decide where you are going to install the unit refering to Fig. 1.

Fig. 1 Mounting Position



2. Once the proper location is secured, use a felt tip pen to outline the 4 holes to be drilled for mounting (Fig. 2).
3. Drill 4.7mm(3/16") diameter on the chassis.
4. Secure the unit on the chassis using the self-tapping screws and the spring washers supplied.

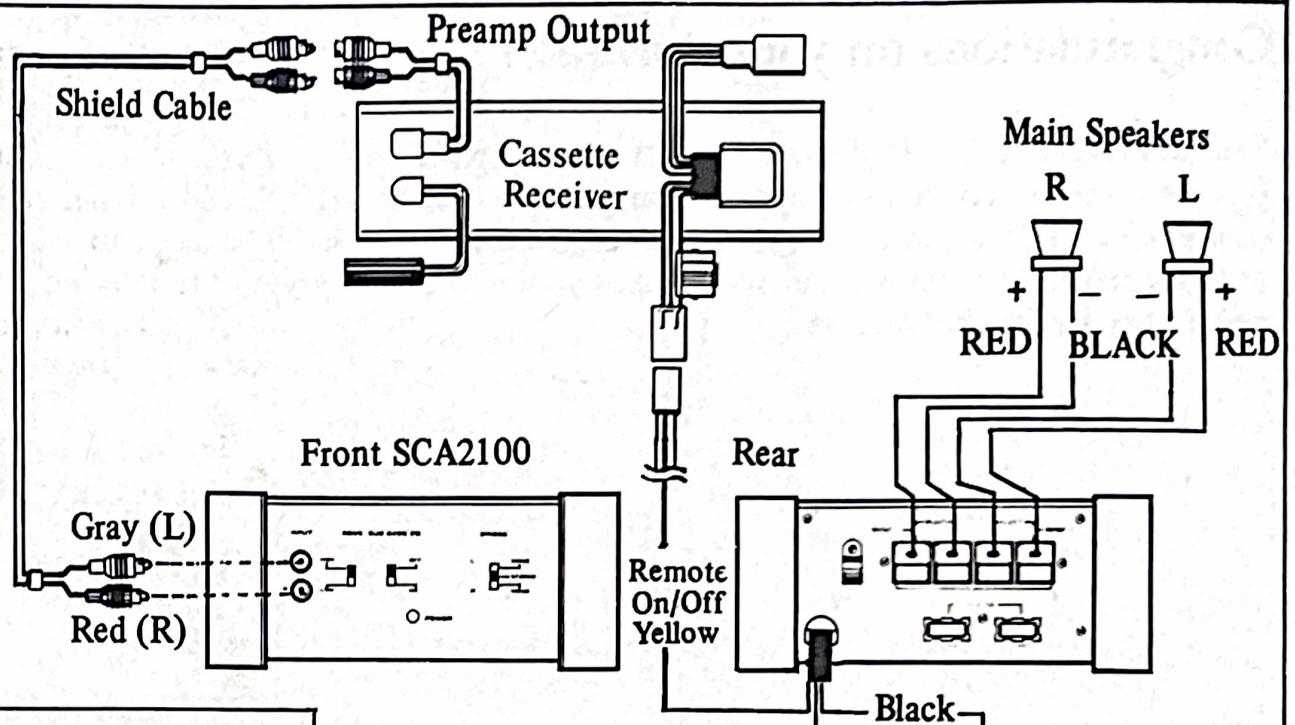


Fig. 2 On-Chassis Mounting

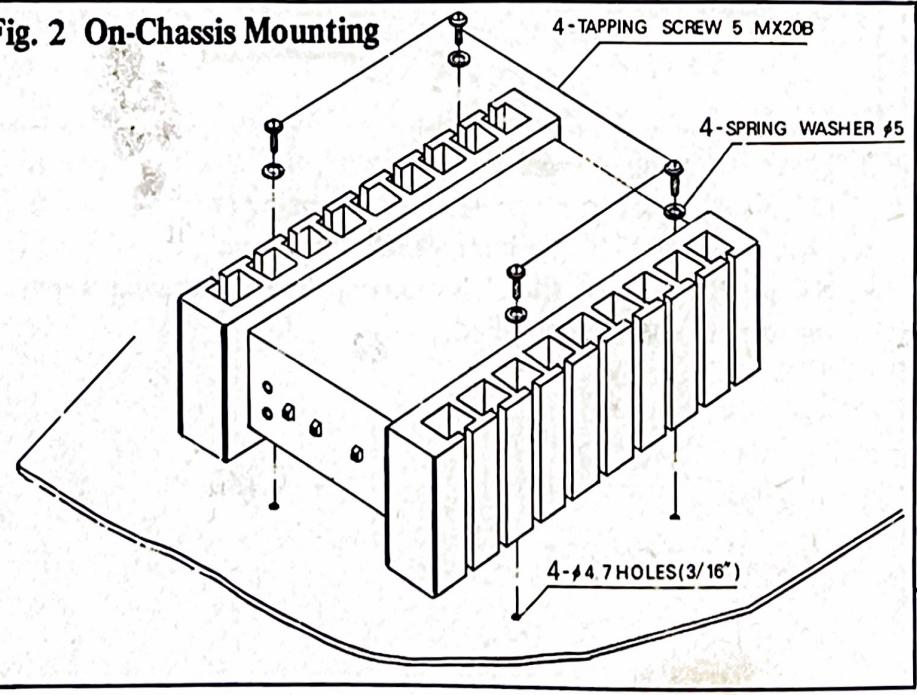
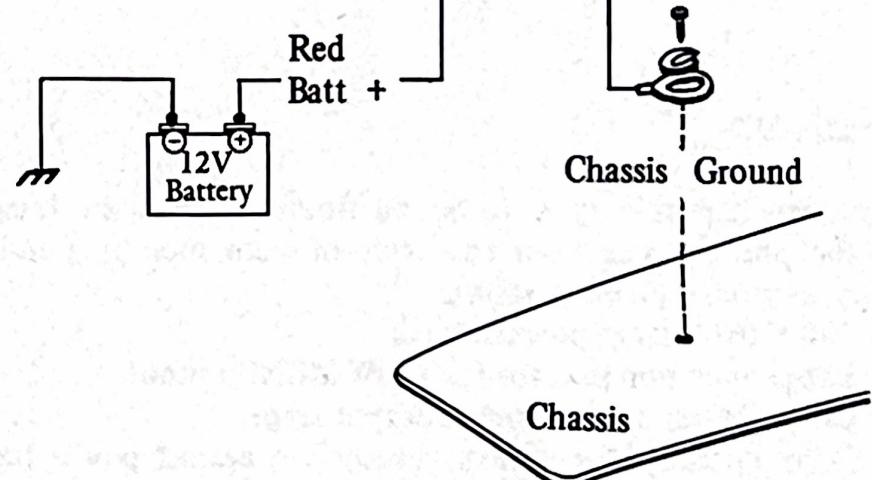


Fig. 3 Single Amplifier Connections



## Single Amplifier Connections (Fig. 3)

**CAUTION:** Before connecting any wire, turn the ignition key and the power switch of your main cassette receiver off.

1. Setting the switches — Confirm the setting of the switches on the front panel if it is SENS at HIGH, SUB BASS EQ at OFF and BRIDGE at STEREO as the factory-set. See the Front Panel Controls section for more details.
2. Speaker connections — Connect your main LEFT and RIGHT speakers to the corresponding speaker terminals referring to Fig. 3 and secure the speaker wires using a wire clamp attached beside the speaker terminals:

**Caution:** Do not commonly ground the negative wires of the speakers, because the output is of floating grounded design.

For all speaker connections, make sure that the phasing is correct. The left and right channels of the amplifier must be connected to the proper speakers and also all positive to positive and negative to negative wire connections must be maintained. Reversing any of these connections will result in the speaker cones moving out of phase which causes bass cancellation.

3. Input connections — Connect the INPUT jacks on the front panel of this unit to the preamp output jacks of your main cassette receiver with the shielded cable supplied with this unit. The red colored plug will carry the right channel signal and the gray colored plug is for the left channel.

### 4. Power supply connections:

- 1) Secure the ground lead (Black) to the chassis by using a screw already attached to the chassis of the car. If a screw is not available near your amplifier, drill 4.7 mm (3/16") diameter on the chassis of the car and secure the ground lead using a self tapping screw and a spring washer

provided with this unit.

- 2) Connect the Red wire (Battery +) to the positive lead directly from the battery. Do not connect this lead to the ignition key controlled positive lead.
- 3) Connect the Yellow wire (Remote ON/OFF) to the remote power control lead (or power antenna control lead) of your main cassette receiver. Then the power of this unit will be automatically controlled by the power switch of your main cassette receiver.

## Two Bridged Amplifier Connection (Fig. 4)

**NOTE:** All connections are the same as the above procedures except following points.

1. Setting the switches — Set the SENS at HIGH, SUB BASS EQ at OFF and BRIDGE at L-MONO for the LEFT channel amplifier, and the SENS at HIGH, SUB BASS EQ at OFF and BRIDGE at R-MONO for the RIGHT channel amplifier.
2. Speaker connections — For the left channel speaker, connect the positive lead of the speaker to the MONO  $\oplus$  speaker terminal of the left channel amplifier and the negative lead to the MONO  $\ominus$  speaker terminal of the left channel amplifier. For the right channel speaker, connect the positive lead to the MONO  $\oplus$  speaker terminal of the right channel amplifier and the negative lead to the MONO  $\ominus$  speaker terminal of the right channel amplifier.
3. Input connections — Plug the left input (Gray plug) to the L-INPUT jack of the left channel amplifier and the right input (Red plug) to the R-INPUT jack of the right channel amplifier.
4. Power supply connections — Connect the 3 wires (Chassis ground, Battery + and Remote ON/OFF) as same way as the above single amplifier connections by paralleling each other.

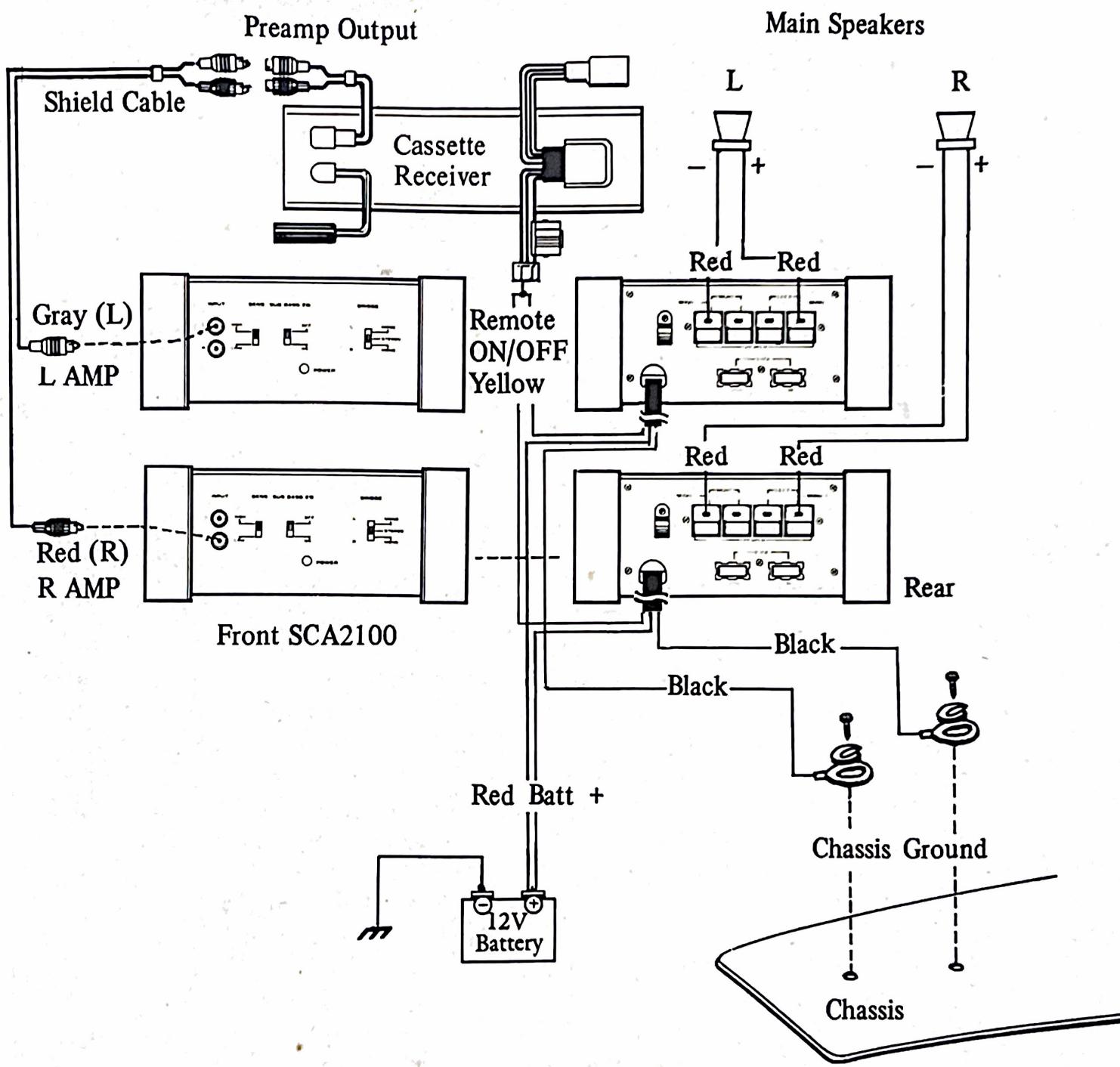


Fig. 4 Two Bridged Amplifier Connections

# Front Panel Controls

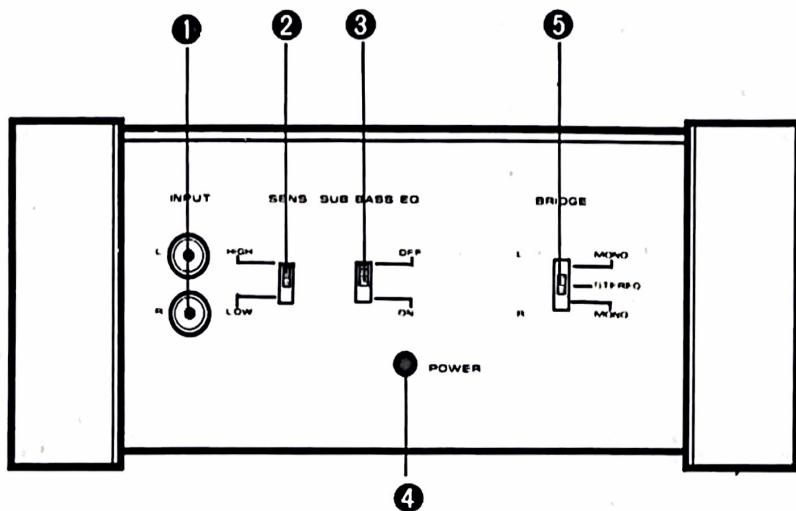


Fig. 5 Front Panel Controls

1. INPUT jacks – The stereo inputs for connections of your main cassette receiver or tuner. See the connections section for details.
2. SENS switch – Leave this switch to the HIGH position as factory-setting if the INPUT jacks of this unit are connected to the preamp outputs of your main cassette receiver or tuner. If your main cassette radio does not have the preamp outputs and you wish to use it as a power booster, connect the INPUT jacks of this unit to the speaker outputs of your radio and set the SENS switch to the LOW position after unscrewing the fixing plate. In this case, note that you can not connect the INPUT jacks of this unit to the speaker outputs of your radio if its output is of floating grounded design. Consult your dealer if in doubt.
3. SUB BASS EQ switch – When ON provides the 6dB of boost at 60Hz and attenuation of frequencies below 60Hz by 12dB/octave.

octave.

The boost at 60Hz will help extending the frequency response of most speakers up to 50Hz by compensating the drop of low frequencies and the attenuation of sub sonic frequencies will effectively eliminate any chance of interactions and damage to the speakers. Experiment.

4. Power indicator – Lights when the unit is in operation.
5. BRIDGE switch – This 3 positions switch allows you to select the mode of the bridgeable operation. In STEREO position as the factory-set it will operate as a conventional stereo amplifier with 70W/CH power output. In the L-MONO or R-MONO position, the amplifier will operate as a mono-amplifier under the bridged connection of the input/output stages. In this case the output power can be increased up to 140W/unit and the only one INPUT jack (L or R) is used according to the setting of this switch.

## Operations

All the operations will be done by the controls of your main cassette receiver or tuner. The FADER control on your main cassette receiver is used for balancing the sound level between the front and rear speakers in 4 speakers system.

## Specifications

## AMPLIFIER SECTION

- AVERAGE POWER OUTPUT/CH INTO 4 OHMS  
 @20Hz-20KHz, 0.2% THD \_\_\_\_\_ 70 Watts  
 @1KHz, 10% THD \_\_\_\_\_ 90 Watts
- POWER OUTPUT OF BRIDGED MONO OPERATION  
 INTO 4 OHMS @1KHz, 0.5% THD \_\_\_\_\_ 140 Watts
- FREQUENCY RESPONSE (-3dB) \_\_\_\_\_ 10Hz-40KHz
- SIGNAL TO NOISE RATIO (IHF A) \_\_\_\_\_ 90dB
- INPUT SENSITIVITY/IMPEDANCE,  
 HIGH \_\_\_\_\_ 350mV/10K ohm  
 LOW \_\_\_\_\_ 1V/10K ohm
- DAMPING FACTOR, STEREO \_\_\_\_\_ 90  
 MONO (Bridged) \_\_\_\_\_ 55

GENERAL

- OPERATING VOLTAGE DC 14.4V  
(10.8V-15.6V allowable)
- SPEAKER IMPEDANCE Minimum 4 ohms
- DIMENSION, W 204 mm (8-1/32")  
H 95 mm (3-3/4")  
D 246 mm (9-11/16")
- NET WEIGHT 3.1Kg (6.9 lbs)
- FUSES, MAIN 25A, Normal Blow  
SWITCHING POWER SUPPLY 3A, Normal Blow

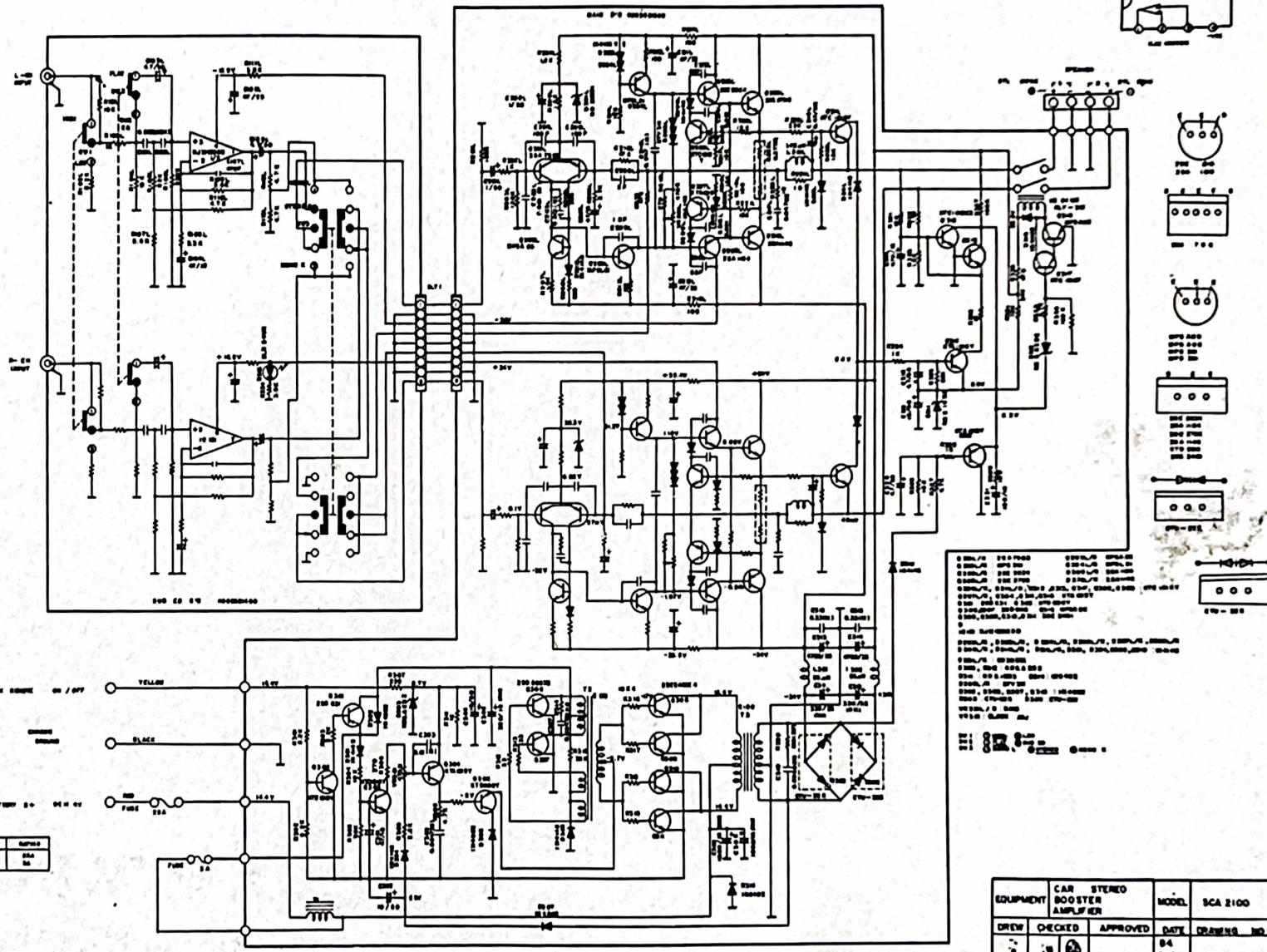
OWNER'S RECORD

SERIAL NO. \_\_\_\_\_  
DATE OF PURCHASE .  
DEALER \_\_\_\_\_

-6-

# SCHEMATIC DIAGRAM

SCHEMATIC DIAGRAM



 Sherwood

13845 ARTESIA BOULEVARD,  
CERRITOS, CA. 90701 U.S.A.



9007010452



## ONE YEAR LIMITED WARRANTY CAR AUDIO PRODUCTS

Sherwood products are manufactured to provide excellent performance, value, and years of trouble-free operation. But even equipment as carefully designed and crafted as Sherwood products can occasionally have problems. At Sherwood we recognize this, and so are pleased to offer this warranty, in the event that you should have trouble with your new Sherwood product. It is important that you read the contents of this warranty and be familiar with it. Should you have any questions, please ask your Sherwood Dealer or contact Sherwood Service directly.

### Scope of Warranty:

Sherwood warrants to the original retail purchaser that Sherwood will repair or replace, at Sherwood's option, any Sherwood car stereo product or component which is found to be defective in material and/or workmanship for one year from date of original retail purchase. During the warranty period, an Authorized Sherwood Service Center will provide both parts and labor free of charge to correct any defect in material or workmanship. This warranty is valid within the United States of America.

### Purchaser's Responsibilities:

1. If your Sherwood dealer from whom you bought your car stereo product is an authorized Sherwood Service Center, notify that dealer within ten (10) days after discovery of a possible defect. Include model and serial numbers and a detailed description of the problem.

2. If you cannot obtain warranty service at your dealer, contact Sherwood Service for the location of the Authorized Sherwood Service Center nearest to you.

3. Make your Sherwood product available to your Sherwood dealer or Authorized Sherwood Service Center for inspection and approved warranty service.

4. Save your **dated sales receipt or other dated proof of purchase** and send a copy of it with your unit to avoid unnecessary delays in obtaining warranty service. Please keep your original sales receipt.

5. If you elect to ship your unit for warranty service, please use the original carton and packing or equivalent. Make sure the unit does not move within the carton as damage may occur. Please apply appropriate insurance to the product and ship it prepaid. Transportation costs to move the product(s) to an authorized repair facility are the responsibility of the purchaser. Transportation costs to move the repaired product(s) back to the purchaser will be born by Sherwood.

6. Please read your owner's manual(s) carefully and become familiar with the proper use and maintenance of your product(s).

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### PLEASE COMPLETE THE FOLLOWING AND MAIL THIS CARD

Model Number \_\_\_\_\_ Serial Number \_\_\_\_\_

Date Purchased \_\_\_\_\_ Selling Dealer \_\_\_\_\_

Dealer Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_

Your Name \_\_\_\_\_

Your Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Your Age Group:  Under 18  18-25  26-35  36-49  50+  Male  Female  Married  Single

Favorite Music:  Rock  Folk  Classical  Jazz  Country & Western

Sound Source:  Records  Cassette  FM  AM  Video  Compact Disc

Have you owned Sherwood equipment previously?  Yes Model \_\_\_\_\_  No

Please list any other equipment you purchased with your new Sherwood product.

Type \_\_\_\_\_ Brand \_\_\_\_\_ Model # \_\_\_\_\_

Which of these factors influenced your purchase of Sherwood products?  Salesman  Dealer Ads  Sherwood Ads  
 Literature  Features  Test Report  Friend's Opinion  Styling  Other \_\_\_\_\_

Please list other car or home electronics you plan to purchase.

Type \_\_\_\_\_ Brand Preference \_\_\_\_\_

Comments:

**Exclusions:**

1. This warranty does not apply to damage or nonperformance resulting from unauthorized alterations or repairs, misuse, mishandling, or abuse to the product.
2. Damage to exterior finish and trim resulting from mishandling or shipping is not covered.
3. Warranty is void if the serial number is removed, defaced, or altered.
4. Normal wear and maintenance are not covered under this warranty.
5. This is not a service contract. This warranty does not include maintenance, cleaning, periodic check-up or charges incurred for installation, removal or reinstallation of product.

**Limitation of Implied Warranties:**

**Any implied warranties, including warranties of merchantability and fitness for a particular purpose, shall be limited in duration to the time periods set forth above.**

**Sherwood shall not be responsible for incidental or consequential damages. Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusion may not apply to you.**

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. This is the only express warranty applicable to SHERWOOD car stereo products, including their accessories. SHERWOOD neither assumes nor authorizes anyone to assume for it any other express warranty.

SHERWOOD reserves the right to make changes or improvements in design or manufacture without incurring any obligation to change or improve products manufactured prior thereto.

**IMPORTANT—Record in the space below the Model and Serial Number which are located on the back or bottom of your equipment. Retain for further reference.**

Model Number\_\_\_\_\_

Serial Number\_\_\_\_\_

Date Purchased\_\_\_\_\_

Dealer Name and Address\_\_\_\_\_



**SHERWOOD SERVICE  
13845 Artesia Blvd., Cerritos, California 90701 (213) 926-6337**

please cut here

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PLACE  
STAMP  
HERE



**Sherwood**  
**13845 ARTESIA BOULEVARD**  
**CERRITOS, CA 90701 U.S.A.**